

WHAT IS CLAIMED IS:

1. An information processing apparatus comprising:

approval request preparing means for
5 preparing an approval request;
storage means for storing an approval service
set by an approval service provider;
decision means for deciding whether or not to
10 approve said prepared approval request, utilizing
said stored approval service; and
output means for outputting the result of
decision of said decision means.

2. An apparatus according to claim 1,
15 further comprising:

execution means for executing a process
corresponding to said approval request in case
said outputted result of decision is an approval.

20 3. An apparatus according to claim 1,
wherein said approval service includes a decision
condition for decision according to the approval
requester and the content of said approval request.

25 4. An apparatus according to claim 3,
wherein said decision condition further includes
information of an information processing apparatus

1003374.12101

preparing said approval request.

5. An apparatus according to claim 1,
wherein said decision means discriminates a period
5 prohibiting said decision and does not execute the
approval decision for said approval request in
case the current time is identified as within a
prohibition period.

10 6. An approval system comprising a service
server for managing plural approval services
registered by an approval service provider and a
client terminal having approval request preparing
means for preparing an approval request;
15 wherein said client terminal further
includes:
acquisition means for searching and acquiring
an approval service matching said approval request,
among the plural approval services registered in
20 said service server;
decision performing means for performing the
approval decision for said approval request,
utilizing said acquired approval service; and
output means for outputting the result of
25 decision of said decision performing means.

7. An approval system according to claim 6,
wherein said service provider registers said

approval service in said service server in
response to the insertion of a card storing
information of said approval service and deletes
the corresponding approval service from said
5 service server in response to the extraction of
said card.

8. An approval system according to claim 6,
wherein said client terminal further includes
10 approval request storage means for storing plural
approval request; and

said decision performing means executes the
approval decision process for the plural approval
requests stored in said approval request storage
15 means.

9. An approval system according to claim 8,
wherein said acquisition means is adapted, upon
detecting that said client terminal is connected
20 to said service server through a network, to
search and acquire an approval service matching
said approval request among the plural approval
services stored in said service server.

25 10. An approval system according to claim 9,
wherein said client terminal is a portable
terminal.

11. An approval system according to claim 6,
wherein said acquisition means is adapted, in
response to the insertion of a card storing said
approval request into said client terminal, to
5 search and acquire an approval service matching
said approval request among the plural approval
services stored in said service server.

12. An approval system according to claim 6,
10 wherein said client terminal further includes
execution means for executing a process
corresponding to said approval request in case
said outputted decision result is an approval.

13. An approval system according to claim 6,
15 wherein said approval service includes a decision
condition for decision according to the approval
requester and the content of said approval request.

14. An approval system according to claim 6,
20 wherein said acquisition means also searches the
approval service stored in said approval service
provider.

15. A service server comprising:
approval service storage means for storing
25 plural approval services instructed for

10033374.12101

registration by an approval service provider; and

transmission means for searching an approval
service matching the approval request and

instructed for search from an external apparatus

5 and transmitting said approval service to said
external apparatus.

16. A service server according to claim 15,
further comprising information means for informing
10 said external apparatus of an information of
registration when a new approval service is
registered by said approval service provider.

17. An approval system comprising a service
15 server for managing plural approval services
registered by an approval service provider, a
client terminal having approval request preparing
means for preparing an approval request and a
request server having approval request storage
20 means for storing the approval request prepared in
said client terminal;

wherein said request server includes:

approval request storage means for storing
the approval request prepared in said client
25 terminal;

acquisition means for searching and acquiring
an approval service matching said approval request

10063871.12101

stored in said approval request storage means,
among the plural approval services registered in
said service server;

decision performing means for performing the
5 approval decision for said approval request,
utilizing said acquired approval service; and

output means for outputting the result of
decision of said decision performing means.

10 18. An approval system according to claim
17, wherein said acquisition means retains said
approval request in said approval request storage
means in case the approval service matching said
approval request cannot be searched in said
15 service server, and, upon detecting registration
of a new approval service in said service server,
again searches and acquires the approval service
matching said retained approval request.

20 19. An approval system according to claim
18, wherein said service server further includes
information means for informing said request
server of an information of registration when a
new approval service is registered by said service
25 provider.

20. An approval system according to claim

17, wherein an approval service corresponding to
an approval decider is registered in said service
server in response to the log-in of said approval
decider in said service provider, and an approval
5 service corresponding to said approval decider is
deleted from said service server in response to
the log-out of said approval decider from said
service provider.

10 21. An approval system according to claim
17, wherein an approval service stored in a card
storing the approval service is registered in said
service server in response to the insertion of
said card in said service provider and the
15 approval service stored in said card is deleted
from said service server in response to the
extraction of said card from said service provider.

22. An approval system according to claim
20 21, wherein said card includes decision condition
data to be used in said approval service.

23. An approval system according to claim
22, wherein said service provider prepares said
25 approval service and registers it in said service
server, based on said decision condition data of
said inserted card.

24. An approval system according to claim 17, wherein said client terminal further includes reception means for receiving the decision result outputted by said output means.

5

25. An approval system according to claim 24, wherein said client terminal further includes execution means for executing a process corresponding to said approval request in case said received decision result is an approval.

10

26. An approval system according to claim 17, wherein said approval service includes a decision condition for decision according to the approval requester and the content of said approval request.

15

27. An approval system according to claim 17, wherein said acquisition means further searches the approval service stored in said approval service provider.

20

28. An approval system according to claim 17, wherein the decision result outputted by said output means is also outputted to said service provider.

25

10033874-12110

29. An approval system comprising a service
server for managing plural approval services
registered by an approval service provider and a
client terminal having approval request preparing
5 means for preparing an approval request;

wherein said client terminal further
includes:

search means for searching an approval
service matching said approval request, among the
10 plural approval services registered in said
service server;

transmission means, in case said the approval
service is searched by said search means, for
transmitting said approval request to said service
15 server; and

reception means for receiving the result of
approval decision for said approval request
transmitted from said service server; and

said service server includes:

20 decision performing means for performing the
approval decision for the approval request
transmitted from said client terminal, utilizing
said acquired approval service matching said
approval request; and

25 transmission means for transmitting the
result of said approval decision to said client
terminal.

30. An approval system comprising a service server for managing plural approval services registered by an approval service provider, a client terminal having approval request preparing means for preparing an approval request, and a request server having approval request storage means for storing the approval request prepared in said client terminal;

wherein said request server includes:

approval request storage means for storing the approval request prepared in said client terminal;

search means for searching an approval service matching the approval request stored in said approval request storage means, among the plural approval services registered in said service server;

transmission means adapted, in case the approval service is searched by said search means, for transmitting said approval service to said service server; and

reception means for receiving the result of approval decision for said approval request from said service server; and

said service server includes:

decision performing means for performing the approval decision for the approval request

transmitted from said request server, utilizing
the approval service matching said approval
request; and

transmission means for transmitting the
5 result of said approval decision to said request
server.

31. An information processing method
comprising:

10 an approval request preparing step of
preparing an approval request;

a storage step of storing an approval service
set by an approval service provider;

15 a decision step of deciding whether or not to
approve said prepared approval request, utilizing
said stored approval service; and

an output step of outputting the result of
decision of said decision step.

20 32. A method according to claim 31, further
comprising:

an execution step of executing a process
corresponding to said approval request in case
said outputted result of decision is an approval.

25

33. A method according to claim 31, wherein
said approval service includes a decision

condition for decision according to the approval requester and the content of said approval request.

34. A method according to claim 33, wherein
5 said decision condition further includes
information of an information processing method
preparing said approval request.

35. A method according to claim 31, wherein
10 said decision step discriminates a period
prohibiting said decision and does not execute the
approval decision for said approval request in
case the current time is identified as within a
prohibition period.

15
36. A control method for an approval system
including a service server for managing plural
approval services registered by an approval
service provider and a client terminal having
20 approval request preparing means for preparing an
approval request, the method comprising, in said
client terminal:

an approval request preparing step of
preparing an approval request;

25 an acquisition step of searching and
acquiring an approval service matching said
approval request, among the plural approval

```
services registered in said service server;
```

a decision performing step of performing the approval decision for said approval request, utilizing said acquired approval service; and

5 an output step of outputting the result of
decision of said decision performing step.

37. A control method for an approval system according to claim 36, wherein said service provider registers said approval service in said service server in response to the insertion of a card storing information of said approval service and deletes the corresponding approval service from said service server in response to the extraction of said card.

38. A control method for an approval system according to claim 36, wherein the method further comprises, in said client terminal an approval request storage step of storing plural approval request in a memory; and

said decision performing step executes the approval decision process for said stored plural approval requests.

25

39. A control method for an approval system according to claim 38, wherein said acquisition

step is adapted, upon detecting that said client
terminal is connected to said service server
through a network, to search and acquire an
approval service matching said approval request
5 among the plural approval services stored in said
service server.

40. A control method for an approval system
according to claim 39, wherein said client
10 terminal is a portable terminal.

41. A control method for an approval system
according to claim 36, wherein said acquisition
step is adapted, in response to the insertion of a
15 card storing said approval request into said
client terminal, to search and acquire an approval
service matching said approval request among the
plural approval services stored in said service
server.

20

42. A control method for an approval system
according to claim 36, wherein the method further
comprises, in said client terminal an execution
step of executing a process corresponding to said
25 approval request in case said outputted decision
result is an approval.

10063874-4240

43. A control method for an approval system according to claim 36, wherein said approval service includes a decision condition for decision according to the approval requester and the content of said approval request.

44. A control method for an approval system according to claim 36, wherein said acquisition step also searches the approval service stored in said approval service provider.

45. A control method for a service server comprising:

an approval service storage step of storing
15 plural approval services instructed for
registration by an approval service provider; and

a transmission step of searching an approval service matching the approval request and instructed for search from an external apparatus and transmitting said approval service to said external apparatus.

46. A control method for a service server according to claim 45, further comprising an information step of informing said external apparatus of an information of registration when a new approval service is registered by said

approval service provider.

47. A control method for an approval system including a service server for managing plural approval services registered by an approval service provider, a client terminal for preparing an approval request and a request server having a memory for storing the approval request prepared in said client terminal;

10 wherein the method comprises, in said request server:

an approval request storage step of storing the approval request prepared in said client terminal;

15 an acquisition step of searching and acquiring an approval service matching said stored approval request, among the plural approval services registered in said service server;

20 a decision performing step of performing the approval decision for said approval request, utilizing said acquired approval service; and

an output step of outputting the result of decision of said decision performing step.

25 48. A control method for an approval system according to claim 47, wherein said acquisition step retains said approval request in said memory

10033371.12101

in case the approval service matching said
approval request cannot be searched in said
service server, and, upon detecting registration
of a new approval service in said service server,
5 again searches and acquires the approval service
matching said retained approval request.

49. A control method for an approval system
according to claim 48, wherein the method further
10 comprises, in said service server, an information
step of informing said request server of an
information of registration when a new approval
service is registered by said service provider.

50. A control method for an approval system
according to claim 47, wherein an approval service
corresponding to an approval decider is registered
in said service server in response to the log-in
of said approval decider in said service provider,
20 and an approval service corresponding to said
approval decider is deleted from said service
server in response to the log-out of said approval
decider from said service provider.

51. A control method for an approval system
according to claim 47, wherein an approval service
stored in a card storing the approval service is

registered in said service server in response to
the insertion of said card in said service
provider and the approval service stored in said
card is deleted from said service server in
5 response to the extraction of said card from said
service provider.

52. A control method for an approval system
according to claim 51, wherein said card includes
10 decision condition data to be used in said
approval service.

53. A control method for an approval system
according to claim 52, wherein said service
15 provider prepares said approval service and
registers it in said service server, based on said
decision condition data of said inserted card.

54. A control method for an approval system
20 according to claim 47, wherein the method in said
client terminal further comprises a reception step
for receiving the decision result outputted by
said output step.

25 55. A control method for an approval system
according to claim 54, wherein the method in said
client terminal further comprises an execution

step of executing a process corresponding to said approval request in case said received decision result is an approval.

5 56. A control method for an approval system according to claim 47, wherein said approval service includes a decision condition for decision according to the approval requester and the content of said approval request.

10

57. A control method for an approval system according to claim 47, wherein said acquisition step further searches the approval service stored in said approval service provider.

15

58. A control method for an approval system according to claim 47, wherein the decision result outputted by said output step is also outputted to said service provider.

20

59. A control method for an approval system including a service server for managing plural approval services registered by an approval service provider and a client terminal for preparing an approval request, the method comprising, in said client terminal:

25

an approval request preparing step of

1002337.1.22.01

preparing an approval request;

a search step of searching an approval service matching said approval request, among the plural approval services registered in said

5 service server;

a transmission step, in case said the approval service is searched by said search step, for transmitting said approval request to said service server; and

10 a reception step of receiving the result of approval decision for said approval request transmitted from said service server; and

the method comprising in said service server:

a decision performing step of performing the
15 approval decision for the approval request transmitted from said client terminal, utilizing said approval service matching said approval request; and

a transmission step of transmitting the
20 result of said approval decision to said client terminal.

60. A control method for an approval system including a service server for managing plural
25 approval services registered by an approval service provider, a client terminal for preparing an approval request, and a request server having a

10023874-133404

memory for storing the approval request prepared in said client terminal;

wherein the method in said request server comprises:

5 an approval request storage step of storing the approval request prepared in said client terminal;

10 a search step of searching an approval service matching the approval request stored in said approval request storage step, among the plural approval services registered in said service server;

15 a transmission step adapted, in case the approval service is searched by said search step, for transmitting said approval service to said service server; and

20 a reception step of receiving the result of approval decision for said approval request from said service server; and
20 the method in said service server comprising:

25 a decision performing step of performing the approval decision for the approval request transmitted from said request server, utilizing the approval service matching said approval request; and

 a transmission step of transmitting the result of said approval decision to said request

1003334-100401

server.

61. A computer program composed of computer executable codes comprising:

5 an approval request preparing step of preparing an approval request;

a storage step of storing an approval service set by an approval service provider;

10 a decision step of deciding whether or not to approve said prepared approval request, utilizing said stored approval service; and

an output step of outputting the result of decision of said decision step.

15 62. A computer executable control program for controlling an approval system including a service server for managing plural approval services registered by an approval service provider and a client terminal having approval
20 request preparing means for preparing an approval request, the method comprising, in said client terminal:

an approval request preparing step of preparing an approval request;

25 an acquisition step of searching and acquiring an approval service matching said approval request, among the plural approval

10023871-12101

services registered in said service server;

a decision performing step of performing the approval decision for said approval request, utilizing said acquired approval service; and

5 an output step of outputting the result of decision of said decision performing step.

63. A computer executable control program for a service server comprising:

10 an approval service storage step of storing plural approval services instructed for registration by an approval service provider; and

a transmission step of searching an approval service matching the approval request and
15 instructed for search from an external apparatus and transmitting said approval service to said external apparatus.

64. A computer executable control program
20 for an approval system including a service server for managing plural approval services registered by an approval service provider, a client terminal for preparing an approval request and a request server having a memory for storing the approval
25 request prepared in said client terminal;

wherein the program comprises, in said request server:

10023871.12401

an approval request storage step of storing the approval request prepared in said client terminal;

an acquisition step of searching and
5 acquiring an approval service matching said stored approval request, among the plural approval services registered in said service server;

a decision performing step of performing the approval decision for said approval request,
10 utilizing said acquired approval service; and

an output step of outputting the result of decision of said decision performing step.

65. A computer executable control program
15 for an approval system including a service server for managing plural approval services registered by an approval service provider and a client terminal for preparing an approval request, the program comprising, in said client terminal:

20 an approval request preparing step of preparing an approval request;

a search step of searching an approval service matching said approval request, among the plural approval services registered in said
25 service server;

a transmission step, in case said the approval service is searched by said search step,

10023871.2401

for transmitting said approval request to said service server; and

a reception step of receiving the result of approval decision for said approval request

5 transmitted from said service server; and

the program comprising in said service server:

a decision performing step of performing the approval decision for the approval request

10 transmitted from said client terminal, utilizing said approval service matching said approval request; and

a transmission step of transmitting the result of said approval decision to said client

15 terminal.

66. A computer executable control program for an approval system including a service server for managing plural approval services registered
20 by an approval service provider, a client terminal for preparing an approval request, and a request server having a memory for storing the approval request prepared in said client terminal;

wherein the program in said request server
25 comprises:

an approval request storage step of storing the approval request prepared in said client

1003331.12101

a search step of searching an approval service matching the approval request stored in said approval request storage step, among the plural approval services registered in said service server;

a transmission step adapted, in case the approval service is searched by said search step, for transmitting said approval service to said service server; and

a reception step of receiving the result of approval decision for said approval request from said service server; and

the program in said service server
comprising:

a decision performing step of performing the approval decision for the approval request transmitted from said request server, utilizing the approval service matching said approval request; and

a transmission step of transmitting the result of said approval decision to said request server.